

# Western Region HIV Annual Epidemiological Profile

Data reported through June 30, 2016

Center for HIV Surveillance, Epidemiology and Evaluation Infectious Disease Epidemiology and Outbreak Response Bureau Prevention and Health Promotion Administration Maryland Department of Health and Mental Hygiene http://phpa.dhmh.maryland.gov/OIDEOR/CHSE 1-800-358-9001

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## Section I – Background Information

#### HIV/AIDS Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in COMAR 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing DHMH Form 1140. Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the State Health Department by mailing DHMH Form 1140. Reports are also accepted by phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health Department where the institution is located by mailing DHMH Form 1140. Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the State Health Department to establish electronic reporting.
- Laboratory Chiefs are required to report patients with laboratory results indicating HIV infection (e.g., positive
  confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and
  phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state
  to the Maryland State Health Department, by mailing DHMH Form 4492. Laboratories are encouraged to contact
  the State Health Department to establish electronic reporting.

Reporting forms and instructions are available on our website: http://phpa.dhmh.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx

#### For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Health Department, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health and Mental Hygiene at 410-767-5227.

#### Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of 6/30/2016. Nationally, it has been estimated that 13.0% of people living with HIV infection are undiagnosed. In Maryland, it has been estimated that 16.3% of people living with HIV infection are undiagnosed. In addition, despite a massive effort during which over 17,000 HIV cases were reported after the Maryland HIV reporting law changed on April 24, 2007, not all diagnosed HIV cases previously reported by Maryland's code-based identifier were located and re-reported by name. Many of the re-reported HIV cases were identified by a recent diagnosis and not by their earliest diagnosis, resulting in an under-reporting of HIV diagnoses before 2001 and an over-reporting of HIV diagnoses from 2001 to 2008. It is important to note that surveillance is an ongoing systematic collection, analysis, interpretation, and dissemination of laboratory data. Furthermore, laboratory data are only available for cases receiving medical care, usually only at facilities in Maryland, and only includes test results that have been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department. Caution should be exercised in using the number of living HIV cases without AIDS and in interpreting trends in the number of reported HIV diagnoses.

In addition to providing estimates of prevalent cases by residence at HIV diagnosis, this epidemiological profile includes estimates for HIV cases whose current residence as of 6/30/2016 was in Maryland. Current residence data are restricted

to cases for which there is a case report form or laboratory test reported between 1/1/2009 and 6/30/2016. Restricting address data to recent years presents the most accurate data available and helps to account for cases that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes cases that may be residents of Maryland but have fallen out of care during the most recent seven years. Current residence utilizes addresses as recent as 2016 but uses laboratory data from 2015 to allow for laboratory reporting.

#### Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

A case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV infection [time point 1].

#### Changes in Case Terminology

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both new and old diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, the reports received through a certain time (six months after December 31<sup>st</sup> of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a six-month lag, and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the Reported HIV Diagnoses for 2015 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV during 01/01/2015-12/31/2015, as reported by name through 6/30/2016.

To calculate the number of Living Cases we count up all of the Reported Diagnoses from the beginning of the epidemic (all the new cases each year) and subtract all of the Reported Deaths. For example, the Total Living HIV Cases on 6/30/2016 are the total of the reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of 12/31/2015 as reported by name through 6/30/2016.

#### Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4 cells per microliter of blood. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "in care."

#### Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health and Mental Hygiene's Enhanced HIV/AIDS Reporting System (eHARS), June 30, 2016. The Western Region consists of the following jurisdictions: Allegany, Frederick, Garrett and Washington.

Population data by sex, age, and race/ethnicity are from the July 1, 2015 U.S. Census Estimates and by country-of-birth from the 2014 American Community Survey (note the difference in total population due to different source). Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

Estimations of those undiagnosed are from Centers for Disease Control and Prevention's 2016 HIV Surveillance Supplemental Report published July 2016. The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

#### **Tabulation of Column Totals**

Figures in tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

#### **Data Suppression**

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- All exposure/risk information if it is describing less than 5 cases, except in the case of "other" exposure.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

#### **HIV Exposure Categories**

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who have sex with men and report injection drug use constitutes a separate transmission category.

**MSM (Men who have Sex with Men):** Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

**Injection Drug Use (IDU):** Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

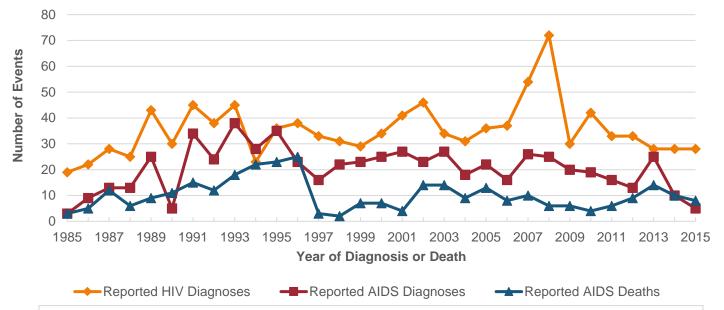
**Heterosexual Exposure (HET)**: Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Perinatal Exposure: Any baby born to an HIV positive mother.

## Section II - Trends 1985-2015

# Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, 1985-2015, Reported through 6/30/2016

Reported HIV Cases with or without an AIDS Diagnosis (Reported HIV Diagnoses) by Year of HIV Diagnosis, Reported HIV Cases with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and Reported HIV Cases with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2015 as Reported through 6/30/2016



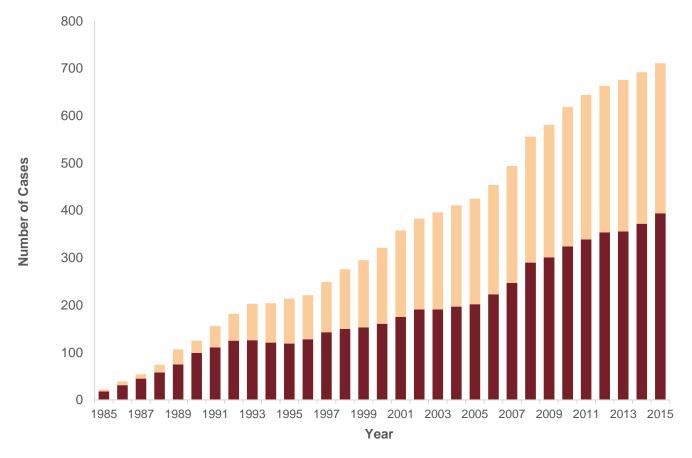
During the 2007-2008 transition to name-based reporting, many HIV cases were reported by a recent HIV diagnosis and not by their earliest HIV diagnosis, resulting in an artificial upward trend in HIV diagnoses during the period 2001-2008.

YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS	YEAR OF DIAGNOSIS OR DEATH	REPORTED HIV DIAGNOSES	REPORTED AIDS DIAGNOSES	REPORTED AIDS DEATHS
<1985	8	5	1	2000	34	25	7
1985	19	3	3	2001	41	27	4
1986	22	9	5	2002	46	23	14
1987	28	13	12	2003	34	27	14
1988	25	13	6	2004	31	18	9
1989	43	25	9	2005	36	22	13
1990	30	5	11	2006	37	16	8
1991	45	34	15	2007	54	26	10
1992	38	24	12	2008	72	25	6
1993	45	38	18	2009	30	20	6
1994	23	28	22	2010	42	19	4
1995	36	35	23	2011	33	16	6
1996	38	23	25	2012	33	13	9
1997	33	16	3	2013	28	25	14
1998	31	22	2	2014	28	10	10*
1999	29	23	7	2015	28	5	8*
				TOTAL	1,100	633	316

<sup>\*2014-2015</sup> reported AIDS deaths are preliminary.

### Figure 2 – Trends in Living HIV Cases, 1985-2015, Reported through 6/30/2016

Reported HIV Cases with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Living HIV Cases without AIDS, Living HIV Cases with AIDS, and Total Living HIV Cases) from 1985 through 2015, as Reported through 6/30/2016



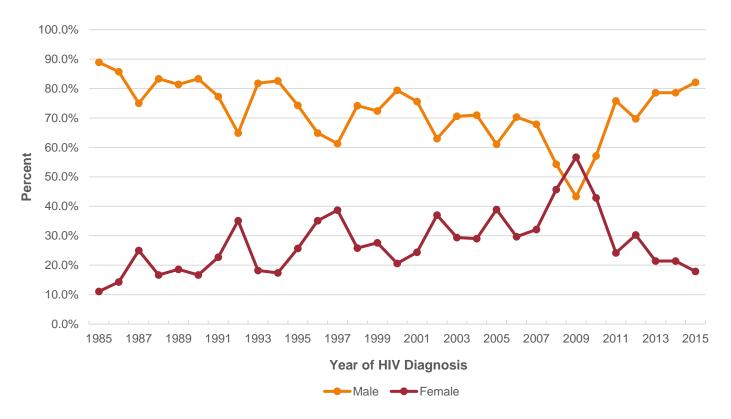
■ Living HIV Cases without AIDS

Living HIV Cases with AIDS

YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES	YEAR	LIVING HIV CASES WITHOUT AIDS	LIVING HIV CASES WITH AIDS	TOTAL LIVING HIV CASES
1985	18	4	22	2000	161	160	321
1986	31	8	39	2001	175	183	358
1987	45	9	54	2002	191	192	383
1988	58	16	74	2003	191	205	396
1989	75	32	107	2004	197	214	411
1990	99	26	125	2005	202	223	425
1991	111	45	156	2006	223	231	454
1992	125	57	182	2007	247	247	494
1993	126	77	203	2008	290	266	556
1994	121	83	204	2009	301	280	581
1995	119	95	214	2010	324	295	619
1996	128	93	221	2011	339	305	644
1997	143	106	249	2012	354	309	663
1998	150	126	276	2013	356	320	676
1999	153	142	295	2014	372	320	692
				2015	394	317	711

# Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2015, Reported through 6/30/2016

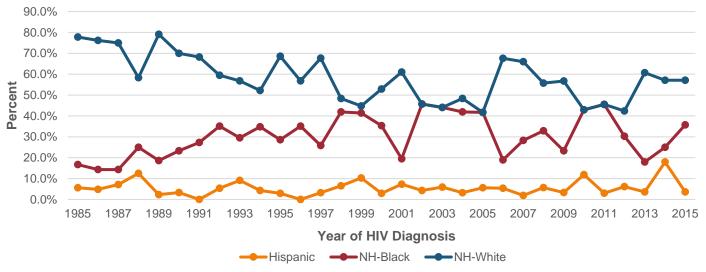
Percent by Sex at Birth of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2015, as Reported through 6/30/2016



YEAR OF HIV	ADULT/A	ADOLESCENT REP DIAGNOSES	ORTED HIV	YEAR OF HIV	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES				
DIAGNOSIS	No.	% Male	% Female	DIAGNOSIS	No.	% Male	% Female		
<1985	8	100.0%	0.0%	2000	34	79.4%	20.6%		
1985	18	88.9%	11.1%	2001	41	75.6%	24.4%		
1986	21	85.7%	14.3%	2002	46	63.0%	37.0%		
1987	28	75.0%	25.0%	2003	34	70.6%	29.4%		
1988	24	83.3%	16.7%	2004	31	71.0%	29.0%		
1989	43	81.4%	18.6%	2005	36	61.1%	38.9%		
1990	30	83.3%	16.7%	2006	37	70.3%	29.7%		
1991	44	77.3%	22.7%	2007	53	67.9%	32.1%		
1992	37	64.9%	35.1%	2008	70	54.3%	45.7%		
1993	44	81.8%	18.2%	2009	30	43.3%	56.7%		
1994	23	82.6%	17.4%	2010	42	57.1%	42.9%		
1995	35	74.3%	25.7%	2011	33	75.8%	24.2%		
1996	37	64.9%	35.1%	2012	33	69.7%	30.3%		
1997	31	61.3%	38.7%	2013	28	78.6%	21.4%		
1998	31	74.2%	25.8%	2014	28	78.6%	21.4%		
1999	29	72.4%	27.6%	2015	28	82.1%	17.9%		
				TOTAL	1,087	71.4%	28.6%		

# Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2015, Reported through 6/30/2016

Percent by Race/Ethnicity of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2015, as Reported through 6/30/2016

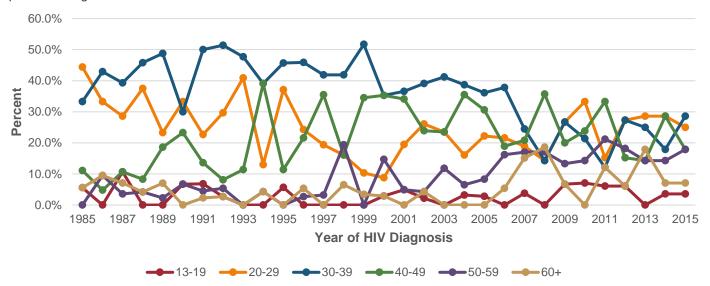


Non-Hispanic Other race not shown

YEAR OF HIV	ADULT/ADOLESCENT REPORTED HIV DIAGNOSES									
DIAGNOSIS	No.	% Hispanic	% Non-Hispanic Black, only	% Non-Hispanic White, only	% Non-Hispanic Other Race					
<1985	8	0.0%	37.5%	62.5%	0.0%					
1985	18	5.6%	16.7%	77.8%	0.0%					
1986	21	4.8%	14.3%	76.2%	4.8%					
1987	28	7.1%	14.3%	75.0%	3.6%					
1988	24	12.5%	25.0%	58.3%	4.2%					
1989	43	2.3%	18.6%	79.1%	0.0%					
1990	30	3.3%	23.3%	70.0%	3.3%					
1991	44	0.0%	27.3%	68.2%	4.5%					
1992	37	5.4%	35.1%	59.5%	0.0%					
1993	44	9.1%	29.5%	56.8%	4.5%					
1994	23	4.3%	34.8%	52.2%	8.7%					
1995	35	2.9%	28.6%	68.6%	0.0%					
1996	37	0.0%	35.1%	56.8%	8.1%					
1997	31	3.2%	25.8%	67.7%	3.2%					
1998	31	6.5%	41.9%	48.4%	3.2%					
1999	29	10.3%	41.4%	44.8%	3.4%					
2000	34	2.9%	35.3%	52.9%	8.8%					
2001	41	7.3%	19.5%	61.0%	12.2%					
2002	46	4.3%	45.7%	45.7%	4.3%					
2003	34	5.9%	44.1%	44.1%	5.9%					
2004	31	3.2%	41.9%	48.4%	6.5%					
2005	36	5.6%	41.7%	41.7%	11.1%					
2006	37	5.4%	18.9%	67.6%	8.1%					
2007	53	1.9%	28.3%	66.0%	3.8%					
2008	70	5.7%	32.9%	55.7%	5.7%					
2009	30	3.3%	23.3%	56.7%	16.7%					
2010	42	11.9%	42.9%	42.9%	2.4%					
2011	33	3.0%	45.5%	45.5%	6.1%					
2012	33	6.1%	30.3%	42.4%	21.2%					
2013	28	3.6%	17.9%	60.7%	17.9%					
2014	28	17.9%	25.0%	57.1%	0.0%					
2015	28	3.6%	35.7%	57.1%	3.6%					
TOTAL	1.087	5.2%	31.0%	57.9%	5.9%					

# Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2015, Reported through 6/30/2016

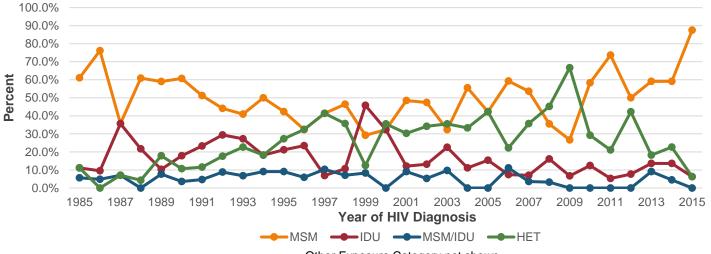
Percent by Age at HIV Diagnosis of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2015, as Reported through 6/30/2016



YEAR OF HIV		REPORTED ADULT/ADOLESCENT HIV DIAGNOSES										
Diagnosis	No.	% Age 13-19	% Age 20-29	% Age 30-39	% Age 40-49	% Age 50-59	% Age 60+					
<1985	8	0.0%	37.5%	50.0%	12.5%	0.0%	0.0%					
1985	18	5.6%	44.4%	33.3%	11.1%	0.0%	5.6%					
1986	21	0.0%	33.3%	42.9%	4.8%	9.5%	9.5%					
1987	28	10.7%	28.6%	39.3%	10.7%	3.6%	7.1%					
1988	24	0.0%	37.5%	45.8%	8.3%	4.2%	4.2%					
1989	43	0.0%	23.3%	48.8%	18.6%	2.3%	7.0%					
1990	30	6.7%	33.3%	30.0%	23.3%	6.7%	0.0%					
1991	44	6.8%	22.7%	50.0%	13.6%	4.5%	2.3%					
1992	37	2.7%	29.7%	51.4%	8.1%	5.4%	2.7%					
1993	44	0.0%	40.9%	47.7%	11.4%	0.0%	0.0%					
1994	23	0.0%	13.0%	39.1%	39.1%	4.3%	4.3%					
1995	35	5.7%	37.1%	45.7%	11.4%	0.0%	0.0%					
1996	37	0.0%	24.3%	45.9%	21.6%	2.7%	5.4%					
1997	31	0.0%	19.4%	41.9%	35.5%	3.2%	0.0%					
1998	31	0.0%	16.1%	41.9%	16.1%	19.4%	6.5%					
1999	29	0.0%	10.3%	51.7%	34.5%	0.0%	3.4%					
2000	34	2.9%	8.8%	35.3%	35.3%	14.7%	2.9%					
2001	41	4.9%	19.5%	36.6%	34.1%	4.9%	0.0%					
2002	46	2.2%	26.1%	39.1%	23.9%	4.3%	4.3%					
2003	34	0.0%	23.5%	41.2%	23.5%	11.8%	0.0%					
2004	31	3.2%	16.1%	38.7%	35.5%	6.5%	0.0%					
2005	36	2.8%	22.2%	36.1%	30.6%	8.3%	0.0%					
2006	37	0.0%	21.6%	37.8%	18.9%	16.2%	5.4%					
2007	53	3.8%	18.9%	24.5%	20.8%	17.0%	15.1%					
2008	70	0.0%	14.3%	14.3%	35.7%	17.1%	18.6%					
2009	30	6.7%	26.7%	26.7%	20.0%	13.3%	6.7%					
2010	42	7.1%	33.3%	21.4%	23.8%	14.3%	0.0%					
2011	33	6.1%	15.2%	12.1%	33.3%	21.2%	12.1%					
2012	33	6.1%	27.3%	27.3%	15.2%	18.2%	6.1%					
2013	28	0.0%	28.6%	25.0%	14.3%	14.3%	17.9%					
2014	28	3.6%	28.6%	17.9%	28.6%	14.3%	7.1%					
2015	28	3.6%	25.0%	28.6%	17.9%	17.9%	7.1%					
TOTAL	1,087	2.9%	24.3%	35.6%	22.4%	9.3%	5.5%					

# Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Exposure Category, 1985-2015, Reported through 6/30/2016

Percent by Exposure Category of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) and with Reported Exposure Category by Year of HIV Diagnosis from 1985 through 2015, as Reported through 6/30/2016



Other Exposure Category not shown

			ADULT/ADOLE	SCENT REPORTE	D HIV DIAGNOSES		
YEAR OF HIV				With Expo	sure Category		
Diagnosis	No.	No.	% MSM	% IDU	% MSM/IDU	% HET	% Other Exposure
<1985	8	7	71.4%	14.3%	14.3%	0.0%	0.0%
1985	18	18	61.1%	11.1%	5.6%	11.1%	11.1%
1986	21	21	76.2%	9.5%	4.8%	0.0%	9.5%
1987	28	28	35.7%	35.7%	7.1%	7.1%	14.3%
1988	24	23	60.9%	21.7%	0.0%	4.3%	13.0%
1989	43	39	59.0%	10.3%	7.7%	17.9%	5.1%
1990	30	28	60.7%	17.9%	3.6%	10.7%	7.1%
1991	44	43	51.2%	23.3%	4.7%	11.6%	9.3%
1992	37	34	44.1%	29.4%	8.8%	17.6%	0.0%
1993	44	44	40.9%	27.3%	6.8%	22.7%	2.3%
1994	23	22	50.0%	18.2%	9.1%	18.2%	4.5%
1995	35	33	42.4%	21.2%	9.1%	27.3%	0.0%
1996	37	34	32.4%	23.5%	5.9%	32.4%	5.9%
1997	31	29	41.4%	6.9%	10.3%	41.4%	0.0%
1998	31	28	46.4%	10.7%	7.1%	35.7%	0.0%
1999	29	24	29.2%	45.8%	8.3%	12.5%	4.2%
2000	34	31	32.3%	32.3%	0.0%	35.5%	0.0%
2001	41	33	48.5%	12.1%	9.1%	30.3%	0.0%
2002	46	38	47.4%	13.2%	5.3%	34.2%	0.0%
2003	34	31	32.3%	22.6%	9.7%	35.5%	0.0%
2004	31	27	55.6%	11.1%	0.0%	33.3%	0.0%
2005	36	26	42.3%	15.4%	0.0%	42.3%	0.0%
2006	37	27	59.3%	7.4%	11.1%	22.2%	0.0%
2007	53	28	53.6%	7.1%	3.6%	35.7%	0.0%
2008	70	31	35.5%	16.1%	3.2%	45.2%	0.0%
2009	30	15	26.7%	6.7%	0.0%	66.7%	0.0%
2010	42	24	58.3%	12.5%	0.0%	29.2%	0.0%
2011	33	19	73.7%	5.3%	0.0%	21.1%	0.0%
2012	33	26	50.0%	7.7%	0.0%	42.3%	0.0%
2013	28	22	59.1%	13.6%	9.1%	18.2%	0.0%
2014	28	22	59.1%	13.6%	4.5%	22.7%	0.0%
2015*	28	16	87.5%	6.3%	0.0%	6.3%	0.0%
TOTAL	1,087	871	48.9%	17.5%	5.4%	25.5%	2.8%

<sup>\*2015</sup> reported HIV exposure data are preliminary.

## Section III - Adult/Adolescent Cases by Jurisdiction

# Table 1 – Adult/Adolescent HIV Diagnoses during 2015, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Jurisdiction, Reported through 6/30/2016

			ADULT/ADOLESCENT REPORTED HIV DIAGNOSES												
JURISDICTION OF RESIDENCE AT HIV DIAGNOSIS	POPULATION AGE 13+	POPULATION	POPULATION	POPULATION	POPULATION				No.	%	No. Late	% Late	First	CD4 Test	Result
		No.	% of Total	Rate	Linked to Care	Linked to Care	HIV Diagnosis	HIV Diagnosis	No. with Test	% with Test	Median Count				
Allegany	63,523	2	7.1%	3.1	***	***	***	***	***	***	***				
Frederick	204,660	13	46.4%	6.4	12	92.3%	***	***	11	84.6%	471				
Garrett	25,567	2	7.1%	7.8	***	***	***	***	***	***	***				
Washington	126,168	11	39.3%	8.7	10	90.9%	***	***	9	81.8%	638				
TOTAL	419,918	28	100.0%	6.7	25	89.3%	4	14.3%	24	85.7%	473				

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Number Linked to Care:** Number of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis calculated from Percent Linked to Care.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Number of Late HIV diagnosis (for HIV diagnoses):** Number of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis calculated from Percent Late HIV Diagnosis.

**Percent Late HIV Diagnosis (for HIV diagnoses):** Number and percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

Table 2 – Adult/Adolescent AIDS Diagnoses during 2015, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction, Reported through 6/30/2016

	ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES									
JURISDICTION OF RESIDENCE AT AIDS DIAGNOSIS	Population Age 13+	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis				
Allegany	63,523	0	0.0%	0.0						
Frederick	204,660	3	60.0%	1.5	***	***				
Garrett	25,567	0	0.0%	0.0						
Washington	126,168	2	40.0%	1.6	***	***				
TOTAL	419,918	5	100.0%	1.2	1.5	80.0%				

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

Population Age 13+: Population age 13 years or older, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis (for AIDS diagnoses):** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

Table 3 – Adult/Adolescent HIV Cases Alive on 12/31/2015, by Jurisdiction, Reported through 6/30/2016

JURISDICTION OF RESIDENCE AT	Population	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS			ADULT/ADOLESCENT LIVING HIV CASES WITH AIDS			ADULT/ADOLESCENT TOTAL LIVING HIV CASES			
DIAGNOSIS	Age 13+	No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Allegany	63,523	41	10.5%	64.5	30	9.6%	47.2	71	10.1%	111.8	894
Frederick	204,660	168	43.2%	82.1	152	48.6%	74.3	320	45.6%	156.4	639
Garrett	25,567	6	1.5%	23.5	4	1.3%	15.6	10	1.4%	39.1	2,556
Washington	126,168	174	44.7%	137.9	127	40.6%	100.7	301	42.9%	238.6	419
TOTAL	419,918	389	100.0%	92.6	313	100.0%	74.5	702	100.0%	167.2	598

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2015.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

# Table 3A – Adult/Adolescent HIV Cases Alive on 12/31/2015, by Jurisdiction and Current Residence, Reported through 6/30/2016

	ADULT/ADOLESCENT LIVING HIV CASES WITH OR WITHOUT AIDS DIAGNOSIS									
JURISDICTION OF	POPULATION	Re	esidence at F	IIV Diagno	osis		Current Re	esidence		
RESIDENCE	Age 13+	No.	% of Total	Rate	Ratio	No.	% of Total	Rate	Ratio	% Change
Allegany	63,523	71	10.1%	111.8	894	101	12.7%	159.0	628	42.3%
Frederick	204,660	320	45.6%	156.4	639	354	44.4%	173.0	578	10.6%
Garrett	25,567	10	1.4%	39.1	2,556	13	1.6%	50.8	1,966	30.0%
Washington	126,168	301	42.9%	238.6	419	330	41.4%	261.6	382	9.6%
TOTAL	419,918	702	100.0%	167.2	598	798	100.0%	190.0	526	13.7%

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Jurisdiction of Residence: Jurisdiction of residence at time of initial HIV diagnosis or most recent lab test.

Population Age 13+: Population age 13 years or older, estimate for 7/1/2015.

Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Current Residence:** Jurisdiction of residence from the most recent laboratory test or case report between 1/1/2009-6/30/2016.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

**Percent Change:** The extent to which a county gained or lost HIV/AIDS cases relative to the number of cases diagnosed in the county.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health and Mental Hygiene at 410-767-5227.

Table 4 – CD4 Test Results for Adult/Adolescent HIV Cases Alive on 12/31/2015, Reported through 6/30/2016

			Adul	T/ADOLESCENT	TOTAL LIVING	HIV CASES									
JURISDICTION OF RESIDENCE		Recent CD4 Test Result													
AT DIAGNOSIS	No.	No. with Test	% with Test	Median Count	-200 200-349		350-499	500+							
Allegany	71	48	67.6%	652	4.2%	8.3%	18.8%	68.8%							
Frederick	320	179	55.9%	565	8.9%	11.2%	20.1%	59.8%							
Garrett	10	6	60.0%	679	16.7%	0.0%	0.0%	83.3%							
Washington	301	160	53.2%	725	6.3%	7.5%	14.4%	71.9%							
TOTAL	702	393	56.0%	633	7.4%	9.2%	17.3%	66.2%							

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year, reported through 6/30/2016. **Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

**Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result measured in the specified year, reported through 6/30/2016.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

Table 5 – Viral Load Test Results for Adult/Adolescent HIV Cases Alive on 12/31/2015, by Jurisdiction, Reported through 6/30/2016

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
JURISDICTION OF RESIDENCE AT		Recent Viral Load Test Result							
Diagnosis	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Allegany	71	48	67.6%	91.7%	22,422				
Frederick	320	186	58.1%	83.9%	4,019				
Garrett	10	6	60.0%	83.3%	565				
Washington	301	160	53.2%	83.8%	707				
TOTAL	702	400	57.0%	84.8%	1,269				

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

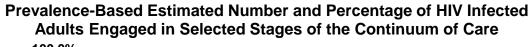
**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year, reported through 6/30/2016.

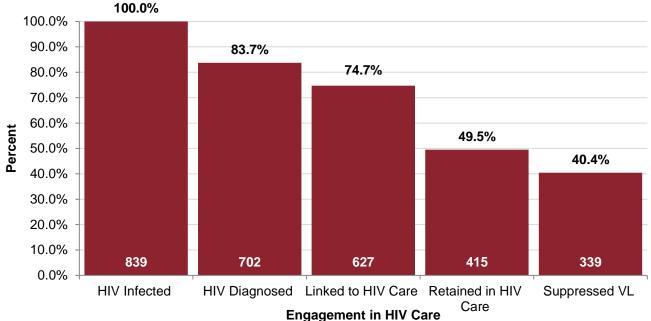
**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load measured in the specified year of less than 200 copies per milliliter, reported through 6/30/2016.

**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result measured in the specified year of 200 copies per milliliter or greater, reported through 6/30/2016.

# Figure 7 – Prevalence-Based Estimated Adult/Adolescent 2015 HIV Continuum of Care Cascades, Reported through 6/30/2016

In their 2011 article in Clinical Infectious Diseases, Gardner et al.¹ utilize a continuum of care "cascade" to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care. The prevalence-based Western Region Engagement in HIV Care Cascade (below) uses a CDC estimate of the percentage of undiagnosed persons in Maryland (16.3%)² to generate an estimated number of HIV infected persons in the Western Region. It then uses local data to describe the number and percentage of persons living with HIV in the Western Region who belong to each of the stages of engagement in HIV care.





CONTINUUM OF CARE STAGE	Number	Percentage		
HIV Infected	839	100.0%		
HIV Diagnosed	702	83.7%		
Linked to HIV Care	627	74.7%		
Retained in HIV Care	415	49.5%		
Suppressed VL	339	40.4%		

**HIV Infected:** HIV Diagnosed divided by one minus the estimate of undiagnosed HIV infections (16.3%) in Maryland. **HIV Diagnosed:** Adult/adolescent total living HIV cases as of December 31<sup>st</sup> of the specified year.

**Linked to HIV Care:** HIV Diagnosed multiplied by the percent of adult/adolescent reported HIV diagnoses during the specified year with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Retained in HIV Care:** HIV Diagnosed with a CD4 or viral load test result measured in the specified year, reported through 6/30/2016.

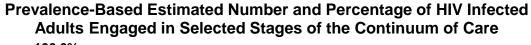
**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year, reported through 6/30/2016 of less than 200 copies per milliliter.

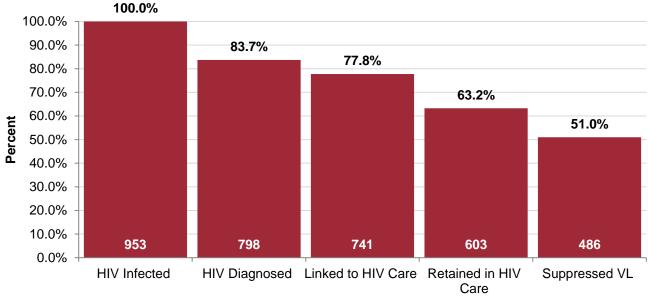
<sup>&</sup>lt;sup>1</sup> Gardner et al, "The Spectrum of Engagement in HIV Care and its Relevance to Test and Treat Strategies for Prevention of HIV Infection." Clin Infect Dis. 2011; 52 (6): 7930-800.

<sup>&</sup>lt;sup>2</sup> Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2014. *HIV Surveillance Supplemental Report* 2016;21(No. 4). http://www.cdc.gov/hiv/library/reports/surveillance/. Published July 2016.

# Figure 7A – Prevalence-Based Estimated Adult/Adolescent 2015 HIV Continuum of Care Cascades, by Current Residence, Reported through 6/30/2016

The prevalence-based Western Region Engagement in HIV Care Cascade (below) uses a CDC estimate of the percentage of undiagnosed persons in Maryland (16.3%)<sup>1</sup> to generate an estimated number of HIV infected persons in the Western Region. It then uses local data for current Western Region residents to describe the number and percentage of persons living with HIV in the Western Region who belong to each of the stages of engagement in HIV care.





**Engagement in HIV Care** 

CONTINUUM OF CARE STAGE	Number	Percentage		
HIV Infected	953	100.0%		
HIV Diagnosed	798	83.7%		
Linked to HIV Care	741	77.8%		
Retained in HIV Care	603	63.2%		
Suppressed VL	486	51.0%		

HIV Infected: HIV Diagnosed divided by one minus the estimate of undiagnosed HIV infections (16.3%) in Maryland.

**HIV Diagnosed:** Adult/adolescent total living HIV as of December 31st of the specified year with a recent address in Maryland between 2009 and 2016.

Linked to HIV Care: HIV Diagnosed multiplied by the percent of adult/adolescent reported HIV diagnoses during the specified year with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Retained in HIV Care:** HIV Diagnosed with a CD4 or viral load test result measured in the specified year, reported through 6/30/2016.

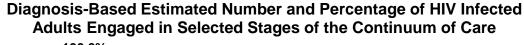
**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load reported in the 12 months prior to December 31<sup>st</sup> of the specified year of less than 200 copies per milliliter.

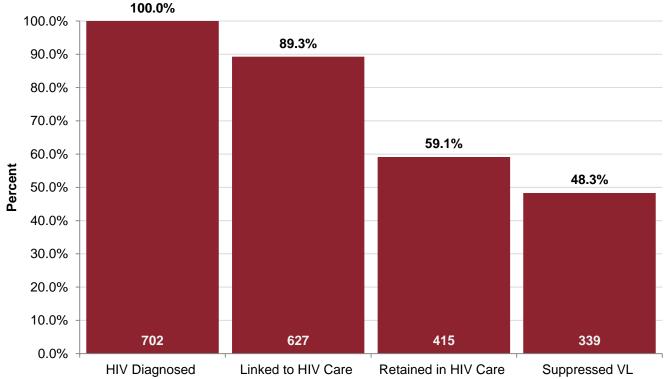
For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health and Mental Hygiene at 410-767-5227.

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2014. *HIV Surveillance Supplemental Report* 2016;21(No. 4). http://www.cdc.gov/hiv/library/reports/surveillance/. Published July 2016.

# Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2015 HIV Continuum of Care Cascades, Reported through 6/30/2016

The diagnosis-based Western Region Engagement in HIV Care Cascade (below) uses local data to describe the number and percentage of persons diagnosed with HIV in the Western Region who belong to each of the stages of engagement in HIV care.





**Engagement in HIV Care** 

CONTINUUM OF CARE STAGE	Number	Percentage
HIV Diagnosed	702	100.0%
Linked to HIV Care	627	89.3%
Retained in HIV Care	415	59.1%
Suppressed VL	339	48.3%

HIV Diagnosed: Adult/adolescent total living HIV cases as of December 31st of the specified year.

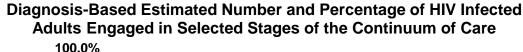
**Linked to HIV Care:** HIV Diagnosed multiplied by the percent of adult/adolescent reported HIV diagnoses during the specified year with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

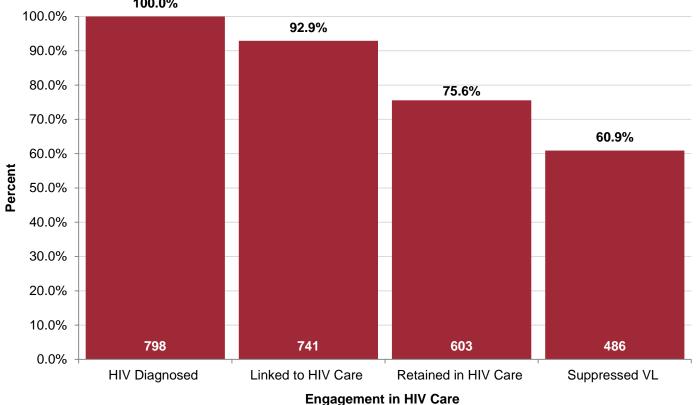
**Retained in HIV Care:** HIV Diagnosed with a CD4 or viral load test result measured in the specified year, reported through 6/30/2016

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter, reported through 6/30/2016.

# Figure 8A – Diagnosis-Based Estimated Adult/Adolescent 2015 HIV Continuum of Care Cascades, by Current Residence, Reported through 6/30/2016

The diagnosis-based Western Region Engagement in HIV Care Cascade (below) uses local data for current Western Region residents to describe the number and percentage of persons diagnosed with HIV in the Western Region who belong to each of the stages of engagement in HIV care.





CONTINUUM OF CARE STAGE	Number	Percentage
HIV Diagnosed	798	100.0%
Linked to HIV Care	741	92.9%
Retained in HIV Care	603	75.6%
Suppressed VL	486	60.9%

**HIV Diagnosed:** Adult/adolescent total living HIV as of December 31<sup>st</sup> of the specified year with a recent address in Maryland between 2009 and 2016.

**Linked to HIV Care:** HIV Diagnosed multiplied by the percent of adult/adolescent reported HIV diagnoses during the specified year with a reported CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Retained in HIV Care:** HIV Diagnosed with a CD4 or viral load test result measured in the specified year, reported through 6/30/2016.

**Suppressed Viral Load:** HIV Diagnosed with the most recent viral measured in the specified year of less than 200 copies per milliliter, reported through 6/30/2016.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health and Mental Hygiene at 410-767-5227.

## Section IV – Cases by Age

Table 6 – HIV Diagnoses during 2015, First CD4 Test Result, Percent Linked to Care, Percent Late Diagnosis, by Age at HIV Diagnosis, Reported through 6/30/2016

		REPORTED HIV DIAGNOSES										
AGE AT HIV					No.	%			First CD4 Test Result			
DIAGNOSIS	No. We of the second se		% Late Diagnosis	No. with Test	% with Test	Median Count						
<5 (Pediatric)	28,165	0	0.0%	0.0								
5-12 (Pediatric)	48,812	0	0.0%	0.0								
13-19	45,713	1	3.6%	2.2	1	100.0%	0	0.0%	1	100.0%	363	
20-29	63,818	7	25.0%	11.0	6	85.7%	0	0.0%	5	71.4%	494	
30-39	61,130	8	28.6%	13.1	8	100.0%	1	12.5%	8	100.0%	555	
40-49	68,269	5	17.9%	7.3	4	80.0%	2	40.0%	5	100.0%	372	
50-59	74,093	5	17.9%	6.7	4	80.0%	1	20.0%	3	60.0%	475	
60+	106,895	2	7.1%	1.9	2	100.0%	0	0.0%	2	100.0%	401	
TOTAL	496,895	28	100.0%	5.6	25	89.3%	4	14.3%	24	85.7%	473	

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Table 7 – AIDS Diagnoses during 2015, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Age at AIDS Diagnosis, Reported through 6/30/2016

		REPORTED AIDS DIAGNOSES							
Age at AIDS Diagnosis	POPULATION	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis			
<5 (Pediatric)	28,165	0	0.0%	0.0					
5-12 (Pediatric)	48,812	0	0.0%	0.0					
13-19	45,713	0	0.0%	0.0					
20-29	63,818	1	20.0%	1.6	***	***			
30-39	61,130	2	40.0%	3.3	***	***			
40-49	68,269	1	20.0%	1.5	***	***			
50-59	74,093	1	20.0%	1.3	***	***			
60+	106,895	0	0.0%	0.0					
TOTAL	496,895	5	100.0%	1.0	1.5	80.0%			

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

**Population:** Population estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

First CD4 Test Result: First reported CD4 test result obtained within 12 months following initial HIV diagnosis.

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Number Linked to Care:** Number of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis calculated from Percent Linked to Care.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Number of Late HIV diagnosis (for HIV diagnoses):** Number of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis calculated from Percent Late HIV Diagnosis.

**Percent Late HIV Diagnosis (for HIV diagnoses):** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**Age at AIDS Diagnosis:** Age group at time of initial AIDS diagnosis.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

Table 8 – HIV Cases Alive on 12/31/2015, by Age on 12/31/2015, Reported through 6/30/2016

AGE ON POPULATION		LIVING HIV CASES WITHOUT AIDS			LIVING	LIVING HIV CASES WITH AIDS			TOTAL LIVING HIV CASES			
12/31/2015	POPULATION	No.	%	Rate	No.	%	Rate	No.	%	Rate	Ratio (1 in X)	
<5	28,165	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0		
5-12	48,812	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0		
13-19	45,713	6	1.5%	13.1	0	0.0%	0.0	6	0.8%	13.1	7,618	
20-29	63,818	43	10.9%	67.4	10	3.2%	15.7	53	7.5%	83.0	1,204	
30-39	61,130	90	22.8%	147.2	32	10.1%	52.3	122	17.2%	199.6	501	
40-49	68,269	98	24.9%	143.5	94	29.7%	137.7	192	27.0%	281.2	355	
50-59	74,093	100	25.4%	135.0	131	41.3%	176.8	231	32.5%	311.8	320	
60+	106,895	57	14.5%	53.3	50	15.8%	46.8	107	15.0%	100.1	999	
TOTAL	496,895	394	100.0%	79.3	317	100.0%	63.8	711	100.0%	143.1	698	

Age on [date]: Age group of living cases on the specified date.

**Population:** Population estimate for 7/1/2015.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 9 – CD4 Test Results for Adult/Adolescent HIV Cases Alive on 12/31/2015, by Age on 12/31/2015, Reported through 6/30/2016

ADULT/ADOLESCENT TOTAL LIVING HIV CASES												
AGE ON		Recent CD4 Test Results										
12/31/2015	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
13-19	1	***	***	***	***	***	***	***				
20-29	50	***	***	***	***	***	***	***				
30-39	122	74	60.7%	666	6.8%	8.1%	23.0%	62.2%				
40-49	191	99	51.8%	626	5.1%	8.1%	18.2%	68.7%				
50-59	231	131	56.7%	601	9.9%	9.2%	16.8%	64.1%				
60+	107	60	56.1%	624	6.7%	15.0%	13.3%	65.0%				
TOTAL	702	393	56.0%	633	7.4%	9.2%	17.3%	66.2%				

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Table 10 – Viral Load Test Results for Adult/Adolescent HIV Cases Alive on 12/31/2015, by Age on 12/31/2015, Reported through 6/30/2016

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES											
Age On 12/31/2015	No.	Recent Viral Load Test Result										
12/01/2010	NO.	No. with Test	% with Test	% Suppressed	Median Unsuppressed							
13-19	1	***	***	***	***							
20-29	50	***	***	***	***							
30-39	122	73	59.8%	82.2%	1,820							
40-49	191	105	55.0%	83.8%	1,235							
50-59	231	134	58.0%	85.8%	1,050							
60+	107	57	53.3%	89.5%	658							
TOTAL	702	400	57.0%	84.8%	1,269							

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Age on [date]: Age group of living cases on the specified date.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year, reported through 6/30/2016.

**Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result measured in the specified year, reported through 6/30/2016.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year, reported through 6/30/2016.

**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load measured in the specified year of less than 200 copies per milliliter, reported through 6/30/2016.

**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result measured in the specified year of 200 copies per milliliter or greater, reported through 6/30/2016.

## Section V – Adult/Adolescent Cases by Demographics

Table 11 – Adult/Adolescent HIV Diagnoses during 2015, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2016

		ADULT/ADOLESCENT REPORTED HIV DIAGNOSES										
	POPULATION				No.	%	No. of		First	CD4 Test	Result	
SEX AT BIRTH	Age 13+*	No.	% of Total	Rate	Linked to Care	Linked to Care	Late Diagnosis	% Late Diagnosis	No. with Test	% with Test	Median Count	
Male	210,006	23	82.1%	11.0	23	100.0%	3	13.0%	21	91.3%	475	
Female	209,912	5	17.9%	2.4	2	40.0%	1	20.0%	3	60.0%	339	
TOTAL	419,918	28	100.0%	6.7	25	89.3%	4	14.3%	24	85.7%	473	

					ADULT/	ADOLESCEN	T REPORTED H	IV DIAGNOSES			
	POPULATION				No.	%	No. of		First	CD4 Test	t Result
RACE/ETHNICITY	AGE 13+*	No.	% of Total	Rate	Linked to Care	Linked to Care	Late Diagnosis	% Late Diagnosis	No. with Test	% with Test	Median Count
Hispanic	21,851	1	3.6%	4.6	1	100.0%	***	***	***	***	***
Non-Hispanic	398,067	27	96.4%	6.8	24	88.9%	***	***	***	***	***
American Indian/ Alaska Native, only	848	0	0.0%	0.0							
Asian, only	11,933	0	0.0%	0.0							
Black, only	36,726	10	35.7%	27.2	***	***	0	0.0%	7	70.0%	372
Native Hawaiian/ Other Pacific Islander, only	215	0	0.0%	0.0							
White, only	341,837	16	57.1%	4.7	15	93.8%	***	***	15	93.8%	635
Multiracial/ Other	6,510	1	3.6%	15.4	***	***	***	***	***	***	***
TOTAL	419,918	28	100.0%	6.7	25	89.3%	4	14.3%	24	85.7%	473

		ADULT/ADOLESCENT REPORTED HIV DIAGNOSES											
COUNTRY OF	POPULATION				No.	%	No. of		First	CD4 Test	Result		
Віктн	Age 13+**	No.	% of Total	Rate	Linked to Care	Linked to Care	Late Diagnosis	% Late Diagnosis	No. with Test	% with Test	Median Count		
United States	30,800	25	89.3%	81.2	***	***	***	***	***	***	***		
Foreign-born	381,815	1	3.6%	0.3	***	***	***	***	***	***	***		
Africa		1	3.6%		***	***	***	***	***	***	***		
Asia		0	0.0%										
Caribbean		0	0.0%										
Central America		0	0.0%										
Other		0	0.0%										
Unknown		2	7.1%		2	100.0%	0	0.0%	2	100.0%	461		
TOTAL	412,615	28	100.0%	6.8	25	89.3%	4	14.3%	24	85.7%	473		

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2015 U.S. Census population estimates

<sup>\*\*</sup> Population data by country of birth are from the 2014 American Community Survey

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

First CD4 Test Result: First reported CD4 test result obtained within 12 months following initial HIV diagnosis.

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Number Linked to Care:** Number of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis calculated from Percent Linked to Care.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Number of Late HIV diagnosis (for HIV diagnoses):** Number of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis calculated from Percent Late HIV Diagnosis.

**Percent Late HIV Diagnosis (for HIV diagnoses):** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

Table 12 – Adult/Adolescent AIDS Diagnoses during 2015, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Sex at Birth, Race/Ethnicity and Country of Birth, Reported through 6/30/2016

			ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES								
Sex At Birth	POPULATION AGE 13+*	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis					
Male	210,006	4	80.0%	1.9	1.9	75.0%					
Female	209,912	1	20.0%	0.5	***	***					
TOTAL	419,918	5	100.0%	1.2	1.5	80.0%					

			ADULT/ADOLE	LESCENT REPORTED AIDS DIAGNOSES				
RACE/ETHNICITY	POPULATION AGE 13+*	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis		
Hispanic	21,851	1	20.0%	4.6	***	***		
Non-Hispanic	398,067	4	80.0%	1.0	***	***		
American Indian/Alaska Native, only	848	0	0.0%	0.0				
Asian, only	11,933	0	0.0%	0.0				
Black, only	36,726	1	20.0%	2.7	***	***		
Native Hawaiian/Other Pacific Islander, only	215	0	0.0%	0.0				
White, only	341,837	2	40.0%	0.6	***	***		
Multiracial/Other	6,510	1	20.0%	15.4	***	***		
TOTAL	419,918	5	100.0%	1.2	1.5	80.0%		

			ADULT/ADOLE	SCENT REPOR	TED <b>AIDS D</b> IAGNOSE	S
County Of Birth	Population Age 13+**	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis
United States	30,800	5	100.0%	16.2	1.5	80.0%
Foreign-born	381,815	0	0.0%	0.0		
Africa		0	0.0%			
Asia		0	0.0%			
Caribbean		0	0.0%			
Central America		0	0.0%			
Other		0	0.0%			
Unknown		0	0.0%			
TOTAL	412,615	5	100.0%	1.2	1.5	80.0%

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2015 U.S. Census population estimates

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis (for AIDS diagnoses):** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

<sup>\*\*</sup> Population data by country of birth are from the 2014 American Community Survey

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

Table 13 – Adult/Adolescent Living HIV Cases with and without AIDS by Sex at Birth, Race/Ethnicity, and Country of Birth, Alive on 12/31/2015 and Reported through 6/30/2016

Sex At Birth	Population	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS				ADOLESCENT CASES WITH A		ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
SEX AT BIRTH	Age 13+*	No.	%	Rate	No.	%	Rate	No.	%	Rate	Ratio (1 in X)	
Male	210,006	262	67.4%	124.8	216	69.0%	102.9	478	68.1%	227.6	439	
Female	209,912	127	32.6%	60.5	97	31.0%	46.2	224	31.9%	106.7	937	
TOTAL	419,918	389	100.0%	92.6	313	100.0%	74.5	702	100.0%	167.2	598	

RACE/ETHNICITY	POPULATION		ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS			ADOLESCENT ASES WITH #		ADULT/ADOLESCENT TOTAL LIVING HIV  CASES			
NACE/ETHNICITY	Age 13+*	No.	%	Rate	No.	%	Rate	No.	%	Rate	Ratio (1 in X)
Hispanic	21,851	22	5.7%	100.7	22	7.0%	100.7	44	6.3%	201.4	496
Non-Hispanic	398,067	367	94.3%	92.2	291	93.0%	73.1	658	93.7%	165.3	604
American Indian/Alaska Native, only	848	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	
Asian, only	11,933	1	0.3%	8.4	5	1.6%	41.9	6	0.9%	50.3	1,988
Black, only	36,726	112	28.8%	305.0	106	33.9%	288.6	218	31.1%	593.6	168
Native Hawaiian/ Other Pacific Islander, only	215	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	
White, only	341,837	230	59.1%	67.3	151	48.2%	44.2	381	54.3%	111.5	897
Multiracial/ Other	6,510	24	6.2%	368.7	29	9.3%	445.5	53	7.5%	814.2	122
TOTAL	419,918	389	100.0%	92.6	313	100.0%	74.5	702	100.0%	167.2	598

Country Of Birth	POPULATION		ADOLESCE			DOLESCENT		ADULT/ADOLESCENT TOTAL LIVING HIV CASES				
COUNTRY OF BIRTH	Age 13+**	No.	%	Rate	No.	%	Rate	No.	%	Rate	Ratio (1 in X)	
United States	30,800	347	89.2%	1,126.6	279	89.1%	905.8	626	89.2%	2,032.5	49	
Foreign-born	381,815	14	3.6%	3.7	28	8.9%	7.3	42	6.0%	11.0	9,090	
Africa		8	2.1%		10	3.2%		18	2.6%			
Asia		2	0.5%		3	1.0%		5	0.7%			
Caribbean		0	0.0%		3	1.0%		3	0.4%			
Central America		3	0.8%		6	1.9%		9	1.3%			
Other		1	0.3%		6	1.9%		7	1.0%			
Unknown		28	7.2%		6	1.9%		34	4.8%			
TOTAL	412,615	389	100.0%	94.3	313	100.0%	75.9	702	100.0%	170.1	587	

<sup>\*</sup> Population data by sex at birth, age, and race/ethnicity are from the 2015 U.S. Census population estimates

**Population Age 13+:** Population greater than or equal to 13 years old, estimate for 7/1/2015.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

<sup>\*\*</sup> Population data by country of birth are from the 2014 American Community Survey

Table 14 –Adult/Adolescent Total Living HIV Cases, Recent CD4 Test Results, by Sex at Birth, Race/Ethnicity and Country of Birth, Alive on 12/31/2015 and Reported through 6/30/2016

			ADULT/ADOLES	SCENT TOTAL L	IVING HIV C	ASES						
Sex At Birth			Recent CD4 Test Result									
SEATH SIMM	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
Male	478	265	55.4%	626	7.2%	9.1%	18.9%	64.9%				
Female	224	128	57.1%	654	7.8%	9.4%	14.1%	68.8%				
TOTAL	702	393	56.0%	633	7.4%	9.2%	17.3%	66.2%				

			ADULT/ADOLES	SCENT TOTAL L	IVING HIV C	ASES		
RACE/ETHNICITY				Recent CI	04 Test Re	sult		
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Hispanic	44	22	50.0%	481	13.6%	4.5%	36.4%	45.5%
Non-Hispanic	658	371	56.4%	641	7.0%	9.4%	16.2%	67.4%
American Indian/Alaska Native, only	0							
Asian, only	6	***	***	***	***	***	***	***
Black, only	218	118	54.1%	564	6.8%	11.9%	21.2%	60.2%
Native Hawaiian/Other Pacific Islander, only	0							
White, only	381	209	54.9%	695	7.7%	6.7%	14.4%	71.3%
Multiracial/Other	53	***	***	***	***	***	***	***
TOTAL	702	393	56.0%	633	7.4%	9.2%	17.3%	66.2%

			ADULT/ADOLES	CENT TOTAL L	IVING HIV C	ASES		
Country Of Birth				Recent C	D4 Test Re	sult		
SCONTRI CI BIRTII	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
United States	626	360	57.5%	634	7.2%	8.9%	17.5%	66.4%
Foreign-born	42	18	42.9%	512	16.7%	16.7%	16.7%	50.0%
Africa	18	10	55.6%	489	20.0%	20.0%	10.0%	50.0%
Asia	5	***	***	***	***	***	***	***
Caribbean	3	***	***	***	***	***	***	***
Central America	9	***	***	***	***	***	***	***
Other	7	***	***	***	***	***	***	***
Unknown	34	15	44.1%	723	0.0%	6.7%	13.3%	80.0%
Total	702	393	56.0%	633	7.4%	9.2%	17.3%	66.2%

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year, as reported through 6/30/2016. **Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result measured in the specified year, as reported through 6/30/2016.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

Table 15 – Adult/Adolescent Total Living HIV Cases, Recent Viral Load Test Results, by Sex at Birth, Race/Ethnicity and Country of Birth, Alive on 12/31/2015 and Reported through 6/30/2016

		ADULT/ADOLESCENT TOTAL LIVING HIV CASES							
SEX AT BIRTH	No.	Recent Viral Load Test Result							
		No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Male	478	269	56.3%	85.9%	1,049				
Female	224	131	58.5%	82.4%	3,610				
TOTAL	702	400	57.0%	84.8%	1,269				

		Adu	LT/ADOLESCENT TO	TAL LIVING HIV CASES					
RACE/ETHNICITY	No.	Recent Viral Load Test Result							
	NO.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Hispanic	44	22	50.0%	77.3%	640				
Non-Hispanic	658	378	57.4%	85.2%	1,378				
American Indian/Alaska Native, only	0								
Asian, only	6	***	***	***	***				
Black, only	218	126	57.8%	80.2%	1,416				
Native Hawaiian/Other Pacific Islander, only	0								
White, only	381	206	54.1%	87.4%	1,288				
Multiracial/Other	53	***	***	***	***				
TOTAL	702	400	57.0%	84.8%	1,269				

		Adu	LT/ADOLESCENT TO	TAL LIVING HIV CASES						
COUNTRY OF BIRTH	No.	Recent Viral Load Test Result								
	NO.	No. with Test	% with Test	% Suppressed	Median Unsuppressed					
United States	626	365	58.3%	84.7%	1,197					
Foreign-born	42	20	47.6%	80.0%	15,520					
Africa	18	10	55.6%	80.0%	17,053					
Asia	5	***	***	***	***					
Caribbean	3	***	***	***	***					
Central America	9	***	***	***	***					
Other	7	***	***	***	***					
Unknown	34	15	44.1%	93.3%	161,390					
TOTAL	702	400	57.0%	84.8%	1,269					

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

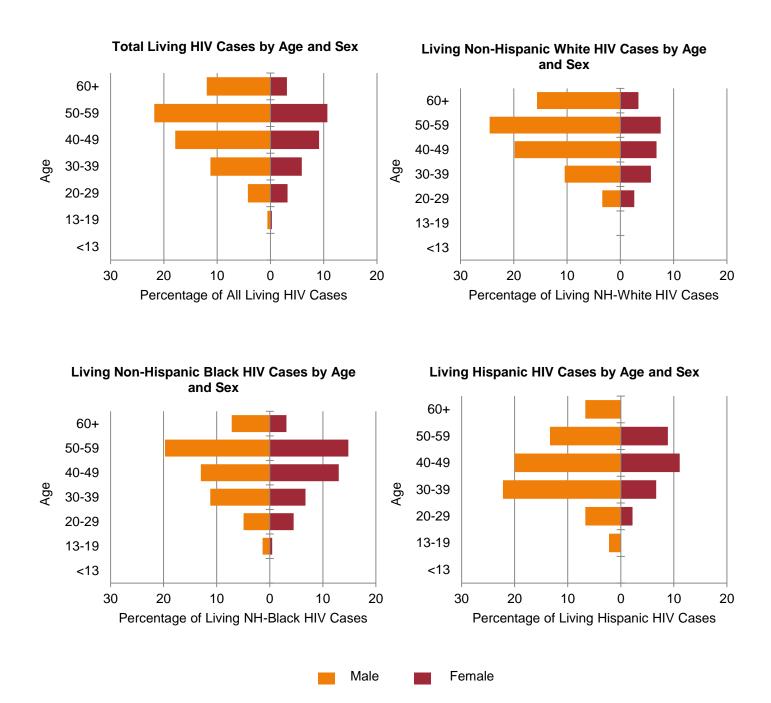
**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year, reported through 6/30/2016.

**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load measured in the specified year of less than 200 copies per milliliter, reported through 6/30/2016.

**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result measured in the specified year, reported through 6/30/2016 of 200 copies per milliliter or greater.

## Section VI – HIV Cases by Expanded Demographics

Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on 12/31/2015 and Reported through 6/30/2016



**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Table 16 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2015 and Reported through 6/30/2016

			MALES			
			RACE/E	THNICITY		
AGE ON 12/31/2015		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non- Hispanic Other Race	TOTAL MALES BY AGE GROUP
	Population	4,035	3,834	27,991	3,838	39,698
12 (Dadiatria)	Cases	0	0	0	0	0
<13 (Pediatric)	Rate	0.0	0.0	0.0	0.0	0.0
	Ratio (1 in X)					
	Population	1,915	2,665	17,246	1,810	23,636
13-19	Cases	***	3	0	***	4
13-19	Rate	***	112.6	0.0	***	16.9
	Ratio (1 in X)	***	888		***	5,909
	Population	2,572	5,304	24,269	1,695	33,840
20-29	Cases	3	11	13	3	30
20-29	Rate	116.6	207.4	53.6	177.0	88.7
	Ratio (1 in X)	857	482	1,866	565	1,128
	Population	2,939	4,667	22,808	1,556	31,970
30-39	Cases	10	25	40	5	80
30-39	Rate	340.3	535.7	175.4	321.3	250.2
	Ratio (1 in X)	293	186	570	311	399
	Population	2,099	4,448	26,570	1,693	34,810
40-49	Cases	9	29	76	13	127
40-49	Rate	428.8	652.0	286.0	767.9	364.8
	Ratio (1 in X)	233	153	349	130	274
	Population	1,230	3,098	31,538	1,212	37,078
50.50	Cases	6	44	94	11	155
50-59	Rate	487.8	1,420.3	298.1	907.6	418.0
	Ratio (1 in X)	205	70	335	110	239
	Population	831	2,003	44,613	1,225	48,672
00.	Cases	***	16	60	***	85
60+	Rate	***	798.8	134.5	***	174.6
	Ratio (1 in X)	***	125	743	***	572
_	Population	15,621	26,019	195,035	13,029	249,704
TOTAL MALES	Cases	32	128	283	38	481
BY RACE/ETHNICITY	Rate	204.9	491.9	145.1	291.7	192.6
. 3.02, 2 111110111	Ratio (1 in X)	488	203	689	342	519

Age on [date]: Age group of living cases on the specified date.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Population: Population estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 17 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on 12/31/2015 and Reported through 6/30/2016

			FEMA	ALES		
	_		RACE/E	THNICITY		
AGE ON 12/31/2015		Hispanic	Non- Hispanic Black, only	Non- Hispanic White, only	Non-Hispanic Other Race	TOTAL FEMALES BY AGE GROUP
	Population	3,712	3,661	26,216	3,690	37,279
<13 (Pediatric)	Cases	0	0	0	0	0
<13 (Pediatric)	Rate	0.0	0.0	0.0	0.0	0.0
	Ratio (1 in X)					
	Population	1,702	2,309	16,175	1,891	22,077
13-19	Cases	0	1	0	1	2
13-19	Rate	0.0	43.3	0.0	52.9	9.1
	Ratio (1 in X)		2,309		1,891	11,038
	Population	2,054	2,792	23,226	1,906	29,978
20-29	Cases	1	10	10	2	23
20-29	Rate	48.7	358.2	43.1	104.9	76.7
	Ratio (1 in X)	2,054	279	2,322	953	1,303
	Population	2,333	2,369	22,517	1,941	29,160
20.20	Cases	3	15	22	2	42
30-39	Rate	128.6	633.2	97.7	103.0	144.0
	Ratio (1 in X)	777	157	1,023	970	694
	Population	1,972	2,553	27,126	1,808	33,459
40.40	Cases	5	29	26	5	65
40-49	Rate	253.5	1,135.9	95.8	276.5	194.3
	Ratio (1 in X)	394	88	1,043	361	514
	Population	1,185	2,189	32,267	1,374	37,015
50.50	Cases	4	33	29	10	76
50-59	Rate	337.6	1,507.5	89.9	727.8	205.3
	Ratio (1 in X)	296	66	1,112	137	487
	Population	1,019	2,328	53,482	1,394	58,223
00.	Cases	0	7	13	2	22
60+	Rate	0.0	300.7	24.3	143.5	37.8
	Ratio (1 in X)		332	4,114	697	2,646
	Population	13,977	18,201	201,009	14,004	247,191
TOTAL FEMALES BY	Cases	13	95	100	22	230
RACE/ETHNICITY	Rate	93.0	521.9	49.7	157.1	93.0
	Ratio (1 in X)	1,075	191	2,010	636	1,074

Age on [date]: Age group of living cases on the specified date.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Population:** Population estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

## Section VII – HIV Exposure Category

Table 18 – Adult/Adolescent HIV Diagnoses during 2015, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Exposure Category and Sex at Birth, Reported through 6/30/2016

				ADULT/ADOLESCENT HIV DIAGNOSES					
		% of Total	No.	%		% Late Diagnosis	First CD4 Test Result		
Exposure Category	No.	with Exposure	Linked to Care	Linked to Care	No. of Late Diagnoses		No. with Test	% with Test	Median Count
With Exposure**	16	100.0%	15	93.8%	***	***	***	***	***
Men who have Sex with Men (MSM)	14	87.5%	14	100.0%	***	***	***	***	***
Injection Drug Users (IDU)	1	6.3%	***	***	***	***	***	***	***
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%							
Heterosexual Exposure (HET)	1	6.3%	***	***	***	***	***	***	***
Other Exposure	0	0.0%							
No Reported Exposure*	12		10	83.3%	1	8.3%	8	66.7%	483
TOTAL	28		25	89.3%	4	14.3%	24	85.7%	473

			Adult	/ADOLESCI	ENT REPORTED	HIV DIAGNOS	ES		
		% of	No.	%	No. of		First CD4 Test Result		
Male Exposure Category	No.	Total with Exposure	Linke d to Care	Linked to Care	Late Diagnose s	% Late Diagnosi s	No. with Tes t	% with Test	Media n Count
With Exposure**	15	100.0%	***	***	***	***	***	***	***
Men who have Sex with Men (MSM)	14	93.3%	14	100.0 %	***	***	14	100.0 %	452
Injection Drug Users (IDU)	1	6.7%	***	***	***	***	***	***	***
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%							
Heterosexual Exposure (HET)	0	0.0%				-			
Other Exposure	0	0.0%							
No Reported Exposure	8		8	100.0 %	1	12.5%	6	75.0%	483
TOTAL	23		23	100.0 %	3	13.0%	21	91.3%	475

	Adult/Adolescent Reported HIV Diagnoses										
		% of Total with Exposure	No.	%			First CD4 Test Result				
Female Exposure Category	No.		Linked to Care	Linked to Care	No. of Late Diagnoses	% Late Diagnosis	No. with Test	% with Test	Median Count		
With Exposure**	1	100.0%	***	***	***	***	***	***	***		
Injection Drug Users (IDU)	0	0.0%									
Heterosexual Exposure (HET)	1	100.0%	***	***	***	***	***	***	***		
Other Exposure	0	0.0%									
No Reported Exposure*	4		2	50.0%	0	0.0%	2	50.0%	489		
TOTAL	5		2	40.0%	1	20.0%	3	60.0%	339		

<sup>\*</sup> Includes 1 new HIV diagnosis with Presumed Female Heterosexual exposure

<sup>\*\* 2015</sup> reported HIV exposure data are preliminary.

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

First CD4 Test Result: First reported CD4 test result obtained within 12 months following initial HIV diagnosis.

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Number Linked to Care:** Number of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis calculated from Percent Linked to Care.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Number of Late HIV diagnosis (for HIV diagnoses):** Number of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis calculated from Percent Late HIV Diagnosis.

**Percent Late HIV Diagnosis (for HIV diagnoses):** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

Table 19 – Adult/Adolescent AIDS Diagnoses during 2015, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Exposure Category and Sex at Birth, Reported through 6/30/2016

	Adult/Adolescent AIDS Diagnoses						
Exposure Category	No.	% of Total with Exposure	Mean Years from HIV Diagnosis	% Late HIV Diagnosis			
With Exposure**	4	100.0%	***	***			
Men who have Sex with Men (MSM)	3	75.0%	***	***			
Injection Drug Users (IDU)	0	0.0%					
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%					
Heterosexual Exposure (HET)	1	25.0%	***	***			
Other Exposures	0	0.0%					
No Reported Exposure	1		0.0	100.0%			
TOTAL	5		1.5	80.0%			

	ADULT/ADOLESCENT AIDS DIAGNOSES							
Male Exposure Category	No.	% of Total with Exposure	Mean Years from HIV Diagnosis	% Late HIV Diagnosis				
With Exposure**	3	100.0%	***	***				
Men who have Sex with Men (MSM)	3	100.0%	***	***				
Injection Drug Users (IDU)	0	0.0%						
Men who have Sex with Men and Inject Drugs (MSM/IDU)	0	0.0%						
Heterosexual Exposure (HET)	0	0.0%						
Other Exposures	0	0.0%						
No Reported Exposure	1		0.0	100.0%				
TOTAL	4		1.9	75.0%				

	ADULT/ADOLESCENT AIDS DIAGNOSES							
FEMALE EXPOSURE CATEGORY	No.	% of Total with Exposure	Mean Years from HIV Diagnosis	% Late HIV Diagnosis				
With Exposure**	1	100.0%	***	***				
Injection Drug Users (IDU)	0	0.0%						
Heterosexual Exposure (HET)	1	100.0%	***	***				
Other Exposures	0	0.0%						
No Reported Exposure	0							
TOTAL	1		0.0	100.0%				

<sup>\*\* 2015</sup> reported HIV exposure data are preliminary

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis (for AIDS diagnoses):** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to12 months prior to their initial AIDS diagnosis.

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

Table 20 – Adult/Adolescent Living HIV Cases with and without AIDS by Exposure Category and Sex at Birth, Alive on 12/31/2015 and Reported through 6/30/2016

Exposure Category	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS			OLESCENT LIVING SES WITH AIDS	ADULT/ADOLESCENT TOTAL LIVING HIV CASES		
EXPOSURE CATEGORY	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure	
With Exposure	258	100.0%	265	100.0%	523	100.0%	
Men who have Sex with Men (MSM)	152	58.9%	107	40.4%	259	49.5%	
Injection Drug Users (IDU)	25	9.7%	41	15.5%	66	12.6%	
Men who have Sex with Men and Inject Drugs (MSM/IDU)	2	0.8%	19	7.2%	21	4.0%	
Heterosexual Exposure (HET)	79	30.6%	97	36.6%	176	33.7%	
Other Exposures	0	0.0%	1	0.4%	1	0.2%	
No Reported Exposure*	131		48		179		
TOTAL	389		313	<u> </u>	702		

Male Exposure Category	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS		ADULT/ADOLESCENT LIVING HIV CASES WITH AIDS		ADULT/ADOLESCENT TOTAL LIVING HIV CASES	
WALE EXPOSURE GATEGORY	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure
With Exposure	190	100.0%	187	100.0%	377	100.0%
Men who have Sex with Men (MSM)	152	80.0%	107	57.2%	259	68.7%
Injection Drug Users (IDU)	11	5.8%	25	13.4%	36	9.5%
Men who have Sex with Men and Inject Drugs (MSM/IDU)	2	1.1%	19	10.2%	21	5.6%
Heterosexual Exposure (HET)	25	13.2%	36	19.3%	61	16.2%
Other Exposures	0	0.0%	0	0.0%	0	0.0%
No Reported Exposure	72		29		101	
TOTAL	262		216		478	

FEMALE EXPOSURE CATEGORY	ADULT/ADOLESCENT LIVING HIV CASES WITHOUT AIDS			ADULT/ADOLESCENT LIVING HIV CASES WITH AIDS		ADULT/ADOLESCENT TOTAL LIVING HIV CASES	
FEMALE EXPOSURE GATEGORY	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure	
With Exposure	68	100.0%	78	100.0%	146	100.0%	
Injection Drug Users (IDU)	14	20.6%	16	20.5%	30	20.5%	
Heterosexual Exposure (HET)	54	79.4%	61	78.2%	115	78.8%	
Other Exposures	0	0.0%	1	1.3%	1	0.7%	
No Reported Exposure*	59		19		78		
TOTAL	127		97		224		

<sup>\*</sup> Includes 2 HIV cases without AIDS and 1 HIV cases with AIDS with Presumed Female Heterosexual exposure

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Table 21 – Adult/Adolescent Total Living HIV Cases by Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on 12/31/2015 and Reported through 6/30/2016

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES								
	Race/Ethnicity								
Exposure Category	Н	lispanic	Non-Hispa	anic, Black, only	Non-Hisp	anic, White, only			
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure			
With Exposure	35	100.0%	150	100.0%	287	100.0%			
Men who have Sex with Men (MSM)	15	42.9%	53	35.3%	169	58.9%			
Injection Drug Users (IDU)	***	***	23	15.3%	32	11.1%			
Men who have Sex with Men and Inject Drugs (MSM/IDU)	***	***	6	4.0%	11	3.8%			
Heterosexual Exposure (HET)	17	48.6%	68	45.3%	75	26.1%			
Other Exposures	0	0.0%	0	0.0%	0	0.0%			
No Reported Exposure*	9		68		94				
TOTAL	44		218		381				

	Adult/Adolescent Total Living HIV Cases							
	Race/Ethnicity							
Male Exposure Category	Hispanic		Non-Hispa	nic, Black, only	Non-Hispanic, White, only			
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure		
With Exposure	26	100.0%	95	100.0%	224	100.0%		
Men who have Sex with Men (MSM)	15	57.7%	53	55.8%	169	75.4%		
Injection Drug Users (IDU)	***	***	15	15.8%	17	7.6%		
Men who have Sex with Men and Inject Drugs (MSM/IDU)	***	***	6	6.3%	11	4.9%		
Heterosexual Exposure (HET)	8	30.8%	21	22.1%	27	12.1%		
Other Exposures	0	0.0%	0	0.0%	0	0.0%		
No Reported Exposure	5		31		59			
TOTAL	31		126		283			

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES						
			Ra	ce/Ethnicity			
FEMALE EXPOSURE CATEGORY	ı	Hispanic	Non-Hisp	anic, Black, only	Non-Hisp	anic, White, only	
	No.	% of Total with Exposure	No.	% of Total with Exposure	No.	% of Total with Exposure	
With Exposure	9	100.0%	55	100.0%	63	100.0%	
Injection Drug Users (IDU)	0	0.0%	8	14.5%	15	23.8%	
Heterosexual Exposure (HET)	9	100.0%	47	85.5%	48	76.2%	
Other Exposures	0	0.0%	0	0.0%	0	0.0%	
No Reported Exposure*	4		37		35		
TOTAL	13		92		98		

<sup>\*</sup> Includes 3 non-Hispanic black cases with Presumed Female Heterosexual exposure

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

<sup>\*\*\*</sup> Data withheld due to low population and/or case counts

Table 22 – Adult/Adolescent Total Living HIV Cases, Recent CD4 Test Results by Exposure Category, Alive on 12/31/2015 and Reported through 6/30/2016

			Adult/A	ADOLESCENT T	OTAL LIVING	HIV CASES			
Exposure Category		Recent CD4 Test Results							
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+	
With Exposure	523	333	63.7%	626	7.2%	9.6%	17.7%	65.5%	
Men who have Sex with Men (MSM)	259	156	60.2%	644	6.4%	7.1%	18.6%	67.9%	
Injection Drug Users (IDU)	66	40	60.6%	509	10.0%	20.0%	20.0%	50.0%	
Men who have Sex with Men and Inject Drugs (MSM/IDU)	21	14	66.7%	533	7.1%	28.6%	14.3%	50.0%	
Heterosexual Exposure (HET)	176	122	69.3%	629	7.4%	7.4%	16.4%	68.9%	
Other Exposures	1	1	100.0%	814	0.0%	0.0%	0.0%	100.0%	
No Reported Exposure*	179	60	33.5%	650	8.3%	6.7%	15.0%	70.0%	
TOTAL	702	393	56.0%	633	7.4%	9.2%	17.3%	66.2%	

<sup>\*</sup> Includes 3 cases with Presumed Female Heterosexual exposure

Table 23 – Adult/Adolescent Total Living HIV Cases, Recent Viral Load Test Results by Exposure Category, Alive on 12/31/2015 and Reported through 6/30/2016

	ADULT/ADOLESCENT TOTAL LIVING HIV CASES						
Exposure Category	No.		Recent Viral	Load Test Results			
	NO.	No. with Test	% with Test	% Suppressed	Median Count		
With Exposure	523	334	63.9%	86.2%	1,252		
Men who have Sex with Men (MSM)	259	156	60.2%	87.8%	928		
Injection Drug Users (IDU)	66	39	59.1%	82.1%	3,090		
Men who have Sex with Men and Inject Drugs (MSM/IDU)	21	15	71.4%	66.7%	1,083		
Heterosexual Exposure (HET)	176	123	69.9%	87.8%	4,427		
Other Exposures	1	1	100.0%	100.0%			
No Reported Exposure*	179	66	36.9%	77.3%	3,610		
TOTAL	702	400	57.0%	84.8%	1,269		

<sup>\*</sup> Includes 3 cases with Presumed Female Heterosexual exposure

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Recent CD4 Test Result:** The most recent CD4 test result measured in the specified year, reported through 6/30/2016. **Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result measured in the specified year, as reported through 6/30/2016.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year, reported through 6/30/2016.

**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load measured in the specified year of less than 200 copies per milliliter reported through 6/30/2016.

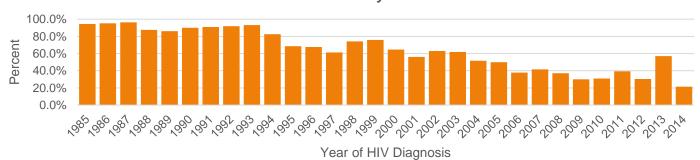
**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result measured in the specified year of 200 copies per milliliter or greater, reported through 6/30/2016.

## Section VIII – Disease Progression and Mortality

# Figure 10 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2014, Reported through 6/30/2016

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis by 12/31/2015 (Adult/Adolescent Reported HIV Diagnoses), Number of Adult/Adolescent Reported HIV Cases with an AIDS Diagnosis by 12/31/2015 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Adult/Adolescent Reported HIV Diagnoses with a Reported AIDS Diagnosis by 12/31/2015, the Average Years from HIV Diagnosis to AIDS Diagnosis for Cases with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported Adult/Adolescent HIV Diagnoses with a Reported AIDS Diagnosis at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2014, as Reported by Name through 6/30/2016

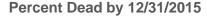
#### Percent with AIDS by 12/31/2015

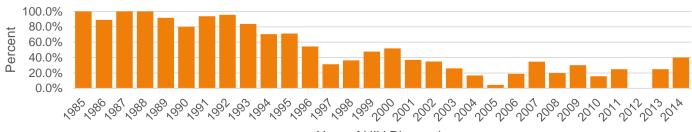


			ADULT/AD	OLESCENT REPORTED	HIV DIAGNOSI	ES		
YEAR OF HIV		Re	ported AIDS Diag	gnoses	Percent wi	th AIDS by	Years After H	IV Diagnosis
DIAGNOSIS	No.	No.	% with AIDS	Mean Years from HIV to AIDS	1 Year	2 Years	5 Years	10 Years
<1985	8	8	100.0%	4.0	62.5%	62.5%	62.5%	75.0%
1985	18	17	94.4%	7.2	22.2%	27.8%	44.4%	66.7%
1986	21	20	95.2%	4.5	47.6%	52.4%	57.1%	81.0%
1987	28	27	96.4%	4.9	42.9%	46.4%	57.1%	78.6%
1988	24	21	87.5%	5.2	41.7%	45.8%	58.3%	62.5%
1989	43	37	86.0%	2.9	48.8%	53.5%	65.1%	79.1%
1990	30	27	90.0%	4.7	23.3%	36.7%	63.3%	76.7%
1991	44	40	90.9%	3.3	50.0%	56.8%	70.5%	77.3%
1992	37	34	91.9%	3.3	43.2%	54.1%	75.7%	81.1%
1993	44	41	93.2%	2.6	56.8%	65.9%	77.3%	84.1%
1994	23	19	82.6%	2.0	56.5%	69.6%	69.6%	78.3%
1995	35	24	68.6%	3.2	40.0%	42.9%	45.7%	65.7%
1996	37	25	67.6%	2.2	43.2%	45.9%	56.8%	64.9%
1997	31	19	61.3%	3.6	35.5%	38.7%	41.9%	54.8%
1998	31	23	74.2%	1.1	61.3%	64.5%	67.7%	71.0%
1999	29	22	75.9%	2.8	48.3%	48.3%	65.5%	65.5%
2000	34	22	64.7%	2.2	44.1%	44.1%	55.9%	58.8%
2001	41	23	56.1%	1.7	36.6%	39.0%	48.8%	56.1%
2002	46	29	63.0%	2.0	39.1%	39.1%	56.5%	60.9%
2003	34	21	61.8%	1.9	41.2%	47.1%	50.0%	58.8%
2004	31	16	51.6%	0.4	48.4%	48.4%	51.6%	51.6%
2005	36	18	50.0%	0.7	38.9%	44.4%	47.2%	50.0%
2006	37	14	37.8%	0.7	29.7%	35.1%	37.8%	
2007	53	22	41.5%	0.5	37.7%	37.7%	41.5%	
2008	70	26	37.1%	1.5	25.7%	27.1%	32.9%	
2009	30	9	30.0%	0.5	26.7%	26.7%	30.0%	
2010	42	13	31.0%	0.2	28.6%	28.6%	31.0%	
2011	33	13	39.4%	0.1	39.4%	39.4%		
2012	33	10	30.3%	0.5	27.3%	27.3%		
2013	28	16	57.1%	0.5	46.4%	50.0%		
2014	28	6	21.4%	0.0	21.4%			
TOTAL	1,059	662	62.5%	2.5	39.7%	43.2%	51.2%	57.3%

# Figure 11 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2014, Reported through 6/30/2016

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by 12/31/2014 (Adult/Adolescent Reported AIDS Diagnoses), Number of Adult/Adolescent Reported AIDS Diagnosis Reported to Have Died of Any Cause by 12/31/2015 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) by 12/31/2015, the Average Years from AIDS Diagnosis to Death for Cases that have Died, and the Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2014, as Reported by Name through 6/30/2016





Year of HIV Diagnosis

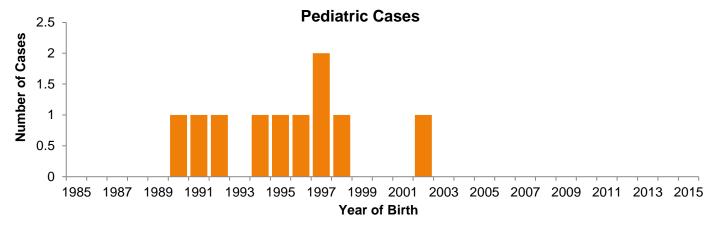
ADULT/ADOLESCENT REPORTED AIDS DIAGNOSES								
YEAR OF HIV	_	R	eported AIDS		Percent A	Alive by Years	s After AIDS D	iagnosis
DIAGNOSIS	No.			Mean Years				
	NO.	No.	% Dead	from AIDS to Death	1 Year	2 Years	5 Years	10 Years
<1985	5	5	100.0%	1.5	40.0%	20.0%	20.0%	0.0%
1985	3	3	100.0%	1.0	66.7%	0.0%	0.0%	0.0%
1986	9	8	88.9%	0.7	22.2%	11.1%	11.1%	11.1%
1987	13	13	100.0%	1.2	38.5%	23.1%	7.7%	0.0%
1988	13	13	100.0%	2.1	69.2%	23.1%	15.4%	0.0%
1989	24	22	91.7%	3.2	70.8%	45.8%	25.0%	12.5%
1990	5	4	80.0%	5.0	80.0%	60.0%	40.0%	40.0%
1991	32	30	93.8%	3.0	75.0%	53.1%	28.1%	15.6%
1992	23	22	95.7%	4.3	78.3%	60.9%	26.1%	21.7%
1993	37	31	83.8%	3.7	75.7%	59.5%	29.7%	24.3%
1994	27	19	70.4%	3.0	81.5%	44.4%	44.4%	37.0%
1995	35	25	71.4%	6.4	80.0%	74.3%	65.7%	48.6%
1996	22	12	54.5%	6.8	86.4%	86.4%	81.8%	59.1%
1997	16	5	31.3%	6.4	100.0%	93.8%	87.5%	75.0%
1998	22	8	36.4%	7.0	95.5%	95.5%	86.4%	68.2%
1999	23	11	47.8%	5.8	95.7%	87.0%	82.6%	56.5%
2000	25	13	52.0%	6.2	84.0%	84.0%	72.0%	68.0%
2001	27	10	37.0%	4.0	96.3%	92.6%	77.8%	63.0%
2002	23	8	34.8%	2.7	82.6%	82.6%	69.6%	65.2%
2003	27	7	25.9%	4.5	88.9%	88.9%	88.9%	74.1%
2004	18	3	16.7%	5.4	100.0%	100.0%	94.4%	83.3%
2005	22	1	4.5%	0.2	95.5%	95.5%	95.5%	95.5%
2006	16	3	18.8%	4.1	93.8%	93.8%	87.5%	
2007	26	9	34.6%	4.1	92.3%	92.3%	84.6%	
2008	25	5	20.0%	2.6	88.0%	88.0%	88.0%	
2009	20	6	30.0%	4.3	95.0%	95.0%	85.0%	
2010	19	3	15.8%	2.7	94.7%	89.5%	89.5%	
2011	16	4	25.0%	1.8	87.5%	87.5%		
2012	13	0	0.0%		100.0%	100.0%		
2013	24	6	25.0%	0.1	75.0%	75.0%		
2014*	10	4	40.0%	0.4	60.0%			
TOTAL	620	313	50.5%	3.8	83.4%	74.8%	64.8%	54.7%

<sup>\*2014</sup> reported AIDS deaths are preliminary.

## Section IX – Pediatric Cases

#### Figure 12 - Trends in Pediatric HIV Cases, 1985-2015, Reported through 6/30/2016

Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Pediatric Total Living HIV Cases) from 1985 through 2015, as Reported by Name through 6/30/2016



		PEDIATRIC REPOR	TED HIV DIAGNOSES		PEDIATRIC TOTAL LIVING HIV CASES
YEAR	No. by Year of	No. by Year of	No. by Year of	No. by Year of	No. Alive on 12/31 of
	Birth	HIV Diagnosis	AIDS Diagnosis	Death	Each Year
<1985	3	0	0	0	
1985	0	1	0	0	1
1986	0	1	0	0	2
1987	0	0	0	0	2
1988	0	1	0	0	3
1989	0	0	1	0	3
1990	1	0	0	0	3
1991	1	1	1	1	4
1992	1	1	1	0	5
1993	0	1	1	0	6
1994	1	0	1	2	4
1995	1	1	0	0	5
1996	1	1	1	1	5
1997	2	2	0	0	7
1998	1	0	0	0	7
1999	0	0	0	0	7
2000	0	0	0	0	7
2001	0	0	0	0	7
2002	1	0	0	0	7
2003	0	0	0	0	7
2004 2005	0	0	0	0	7
2005	0	0	1	0	6
2006	0	0	0	0	6
2007	0	1	0	0	7
2009	0	2	0	0	9
2010	0	0		0	9
2010	0	0	0		9
2011	0	0	0	<u>0</u> 1	9
2012	0	0	0	0	10
2013	0	0	0	1	9
2014	0	0	0	0	9
TOTAL	13	13	7		9
IOIAL	13	13		6	

Table 24 – Pediatric HIV Total Living HIV Cases, Alive on 12/31/2015, by Jurisdiction, Reported through 6/30/2016

JURISDICTION OF RESIDENCE AT DIAGNOSIS	PEDIATRIC TOTAL LIVING HIV CASES			
JURISDICTION OF RESIDENCE AT DIAGNOSIS	No.	% of Total		
Allegany	1	11.1%		
Frederick	6	66.7%		
Garrett	0	0.0%		
Washington	2	22.2%		
TOTAL	9	100.0%		

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at time of initial HIV diagnosis for pediatric reported HIV diagnoses, and jurisdiction of residence at later of time of initial HIV diagnosis or initial AIDS diagnosis for pediatric total living HIV cases.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

Table 25 – Pediatric Total Living HIV Cases by Sex at Birth and Race/Ethnicity, Alive on 12/31/2015 and Reported through 6/30/2016

SEX AT BIRTH	PEDIATRIC TOTAL LIVING HIV CASES				
SEX AT BIRTH	No.	% of Total			
Male	6	66.7%			
Female	3	33.3%			
TOTAL	9	100.0%			

RACE/ETHNICITY	PEDIATRIC TOTAL LIVING HIV CASES	
	No.	% of Total
Hispanic	1	11.1%
Non-Hispanic	8	88.9%
American Indian/ Alaska Native, only	1	11.1%
Asian, only	0	0.0%
Black, only	5	55.6%
Native Hawaiian/Other Pacific Islander, only	0	0.0%
White, only	2	22.2%
Multiracial/Other	0	0.0%
Total	9	100.0%

**Pediatric Reported HIV Diagnoses:** Reported HIV diagnoses, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, with initial HIV diagnosis during the specified year.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

## Glossary of Terms

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Age at AIDS Diagnosis: Age group at time of initial AIDS diagnosis.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

Age on [date]: Age group of living cases on the specified date.

AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis that have died due to any cause.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

**Current Residence:** Jurisdiction of residence from the most recent laboratory test or case report between 1/1/2009-6/30/2016.

First CD4 Test Result: First reported CD4 test result obtained within 12 months following initial HIV diagnosis.

Jurisdiction of Residence: Jurisdiction of residence at time of initial HIV diagnosis or most recent lab test.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at the later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Living HIV Cases with AIDS:** Reported HIV diagnoses with an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

**Living HIV Cases without AIDS:** Reported HIV diagnoses without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Mean Years from AIDS diagnosis to AIDS Death:** Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

**Median**: The measure of central location, which divides a set of data into two equal parts.

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result measured in the specified year, reported through 6/30/2016.

**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result measured in the specified year of 200 copies per milliliter or greater, reported through 6/30/2016.

**Number Linked to Care:** Number of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis calculated from Percent Linked to Care.

**Number of Late HIV diagnosis (for HIV diagnoses):** Number of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis calculated from Percent Late HIV Diagnosis.

**Pediatric Reported HIV Diagnoses:** Reported HIV diagnoses, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, with initial HIV diagnosis during the specified year.

**Pediatric Total Living HIV Cases:** Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31<sup>st</sup> of the specified year.

**Percent Alive by Years after AIDS Diagnosis:** Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

**Percent Late HIV Diagnosis (for AIDS diagnoses):** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

**Percent Late HIV Diagnosis (for HIV diagnoses):** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load measured in the specified year of less than 200 copies per milliliter, reported through 6/30/2016.

**Percent with AIDS:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis by 12/31/2015.

**Percent with AIDS by Years after HIV Diagnosis:** Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

Population: Population estimate for 7/1/2015.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year, reported through 6/30/2016.

**Recent Viral Load Test Result:** The most recent viral load test result measured in the specified year, reported through 6/30/2016.

**Reported AIDS Deaths:** Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

Retained in HIV Care: HIV Diagnosed with a CD4 test result measured in the specified year, reported through 6/30/2016.

**Total Living HIV Cases:** Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.